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Charles J. Rupnick PO Box 46752			STERLING, AMY JO	
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			3632	
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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/698,158 Filing Date: October 31, 2003

Appellant(s): CARNEVALI, JEFFREY D.

MAILED

OCT 1 8 2007

**GROUP 3600** 

Charles Rupnick For Appellant

**EXAMINER'S ANSWER** 

This is in response to the appeal brief filed 9/10/07 appealing from the Office action mailed 2/27/07.

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### (1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

#### (2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

## (3) Status of Claims

The statement of the status of claims contained in the brief is correct.

#### (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

## (5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

## (6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

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## (7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

#### (8) Evidence Relied Upon

6749160 Richter 06-2004

4020575 Kruger et al. 05-1977

## (9) Grounds of Rejection

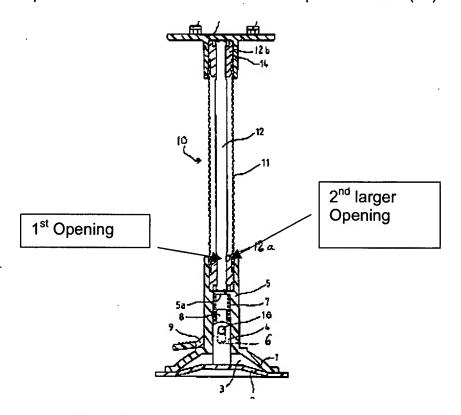
The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-3, 5, 6, 8-10, 14-16 and 17-19 stand rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent No. 6749160 to Richter and in view of United States Patent No. 4020575 to Kruger et al.

Richter teaches the basic inventive including teaching a flexible support apparatus (10) having a support base (10) having an opening in one surface and a mounting bracket having an opening (13) in one surface and a permanently bendable continuously solid metal rod of substantially constant cross section, the rod being made of aluminum (12, See Col. 3 line 9 for rod material) having a first end installed in the opening of the support base and fused directly to the support base and having a second end installed in the opening of the mounting means and fused directly to the mounting bracket and wherein the opening in the support base and mounting bracket have a second larger opening (Inner and outer openings, See Drawing Below) into which a flexible sheath (11) if inserted. Richter teaches the method forming a support base,

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forming a mounting bracket and fusing a length of the rod to the tubular apertures of the base and the bracket, a flexible plastic sheath (11) disposed around the metal rod (12) between the support base and the mounting bracket and wherein the bracket and the base both have a respective counter-bore which is substantially concentric with the respective tubular aperture and sized to admit the flexible plastic sheath (11).



Richter does not teach that a welded/ultrasonically welded joint is formed directly between the first end of the metal rod and the support base and that the base or that the base and bracket are formed of ultrasonically weldable plastic Richter also does not teach the method of ultrasonically welding the plastic or metal to fetal fusible by conventional means. Richter does teach that there is a joint formed directly between the first end of the metal rod and the support base.

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Kruger et al. teaches a device with ultrasonically weldable plastic and the method of using ultrasonically weldable plastic used for securely bonding two elements together. (See Col. 1, line 37 and Col. 2, line 12).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made from the teachings of Kruger et al. to have fused any pieces together either by welding or by using an ultrasonic weldable plastic in order to secure elements together, welding and weldable plastic both being well known in the art at the time of the invention. It would also be obvious to have had metal to metal fused, the choice of any suitable material being obvious.

Claims 13, 20 and 21 stand rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent No. 6749160 to Richter and in view of United States Patent No. 4020575 to Kruger et al.as applied to claim 9 above and further in view of United States Patent No. 6811146 to Giralt.

Richter and Kruger et al. teach the basic inventive concept, including the method of installing a flexible sheath (10) around a solid metal rod (16).

Richter and Kruger et al. do not teach that the support base and mounting bracket are made of aluminum or the method of forming a support base and mounting bracket of weldable aluminum material.

Giralt teaches a aluminum that is weldable material (See Col. 4 lines 39-41) and it would have been obvious to one having ordinary skill in the art at the time the invention was made from the teachings of Giralt to have made the device and its parts

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of any suitable material or method of forming them from any suitable material, in order to easily attach the components to each other.

Claims 7, 11 and 12 stand rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent No. 6749160 to Richter and in view of United States Patent No. 4020575 to Kruger et al. as applied to claim 10 above and further in view of United Sates Patent No. 6637642 to Lingnau.

Richter and Kruger et al. and show the basic inventive concept as shown above with the exception that they do not teach that the metal rod is made of upset metal finish prior to welding or an upset surface material or the method of upsetting the metal around the rod.

Lingnau discloses solid state welding including teaching that the upset finish prior to welding of the metal can and will affect the welding profile. (See Col. 8, lines 6-24). Therefore it would have been obvious to make the metal tubing with an upset finish on the surface, in order to further change the welding characteristics of the metal rod.

## (10) Response to Argument

The applicant has argued has argued that the rejection under 35 USC 103(a) in view of Richter and Kruger et al. is improper because Richter does not disclose that the support base is directly fused to the metal rod. The applicant recites that the Richter

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reference discloses that the support base and metal rod are "firmly connected" and that is not synonymous with "directly fused".

This is unpersuasive for two reasons. First, the Richter references does meet the claim limitation of the support base being "fused" with the rod, because it recites that the base and the rod are "firmly connected" which is enough to meet the term of "fuse", because the applicant is using the term to describe that two elements are somehow "connected".

Secondly, the Richter reference is not intended to stand alone in meeting all of the claim limitations, it is the combination of the references that teaches the inventive concept. Therefore, the term "firmly connected" does not have to be "synonymous" with the term "fused" because "firmly connected" is a motivation for combination with another reference which teaches certain kinds elements which are "firmly connected". So any supposed deficiencies that Richter may have are made up by showing a reference that clearly teaches that the fusing of two elements together by welding is well known at the time of the invention and therefore an obvious mode for connection.

Also, even though the Kruger et al. reference may have structural differences than the Richter reference, it is still considered within the same art because the Kruger et al. reference is being used to teach the art concept of the "connection of elements" such as welding and is not being used to teach any of the other structural concepts.

Also, the applicant has argued that the welding of the rod and the support base is impermissible hindsight. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be

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recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). It is evident from the teachings of both references that connecting two elements by welding was well within the knowledge of one of ordinary skill in the art of connecting at the time of the invention and that is was not gleaned from the applicant's disclosure.

The applicant has argued that the Kruger et al. reference "teaches away" from the limitation of being directly fused by welding because it teaches a plastic to plastic weld instead of the metal to metal connection. This is unpersuasive because the reference is being used to teach the concept of welding or ultrasonic welding and a difference in material does not render "teaching away", but merely is including the broad teaching of "connecting by welding".

Finally, although Richter does not specifically teach connecting the elements by welding it would be obvious to one of ordinary skill in the art to have made the connection in this manner because welding two pieces together, whether plastic or metal has a predictable result. (See <u>KSR v. Teleflex</u>, 550 U.S., 127 S. Ct. 1727 (2007)).

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## (11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

AMY J. STERLING PRIMARY EXAMINER TECHNOLOGY CENTER 3600

Amy J. Sterling 10/11/07

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Carl Friedman